Note: Category 1 wasterock = Low S
Category 4 wasterock = Highest S

Table 3.2-16 Comparison of DEIS, SDEIS, and FEIS for the NorthMet Project Proposed Action

DEIS Proposed Action	NorthMet Project Proposed Action as Presented in SDEIS Only	NorthMet Project Proposed Action as Presented in FEIS Only	DEIS to FEIS Comparison of Environmental Consequences
Mine Site			
• Category 1 and 2 waste rock would be stored in a permanent soil-lined/soil-covered stockpile (Category 1/2 Stockpile) north of the west pit (years 1-11). • Category 1 and 2 waste rock generated after year 11 would be backfilled to the East Pit. • Category 3 waste rock would be placed on a permanent lined/covered stockpile (east of the East Pit) or Category 3 Lean Ore Stockpile (southeast of the East Pit). • Category 4 waste rock would be stored on a permanent, lined and covered waste rock stockpile (south of the East Pit). • Category 4 lean ore would be hauled to the Rail Transfer Hopper or stored on the Lean Ore Surge Pile. • Saturated overburden would be placed in the Category 1/2 Stockpile. • A WWTF used to treat process water collected from lined stockpiles would be located on the south side	• Category 1 waste rock mined from years 1-13 would be stored in an unlined, permanent stockpile north of the West Pit. The stockpile would have a geomembrane cover system at completion and surface water and groundwater collection system would encompass the entire stockpile and direct water to the Mine Site WWTF. • Category 2/3 waste rock mined from years 1-11 stored in a temporary stockpile (with a geomembrane liner system) southeast of the mine pits. • Category 4 waste rock mined from years 1-11 stored in a temporary stockpile (with a geomembrane liner system) on the top of the un-mined Central Pit. • The temporary Category 2/3 Stockpile and Category 4 Stockpile and all new waste rock mined in years 11-20 would be backfilled into the East Pit and Central Pit and stored subaqueously. • Saturated overburden would be used as approved by the MDNR or placed in stockpiles with geomembrane liners (Category 2/3 Stockpile or Category 4 Stockpile). • WWTF located south of the West Pit and Central Pit, east of the Overburden Storage and Laydown Area, and immediately adjacent to the Rail Transfer Hopper. It would be	• As per the SDEIS.	• Elimination of three permanent stockpiles and highest sulfur rock backfilled to East and Central pits, which would be flooded for subaqueous disposal. • Enhanced geomembrane-covered permanent Category 1 Stockpile. • Reduction in wetland effects. • Capture and treatment of most (estimated to be above 90 percent capture) of groundwater and surface seepage from stockpiles. • Minimization of the long-term water flow through the permanent stockpile, resulting in substantial reduction of stockpile seepage volumes to be treated and improvement in West Pit water quality post closure.

DEIS Proposed Action	NorthMet Project Proposed Action as Presented in SDEIS Only	NorthMet Project Proposed Action as Presented in FEIS Only	DEIS to FEIS Comparison of Environmental Consequences
of the West Pit, west of the Overburden Storage and Laydown Area.	upgraded to include RO that would meet water quality targets after closure.		
Plant Site			
• Upgrading existing and constructing new processing facilities located at the former LTVSMC processing plant. • Seepage from the toe of the Tailings Basin collected through a series of header pipes, recovery trenches, and vertical extraction wells returning seepage to the tailings basin. • No Tailings Basin cover proposed. • Hydrometallurgical Residue Facility located on top of the existing LTVSMC Tailings Basin Cell 2W.	• As per the DEIS, with some minor changes to the layout of processing facilities, the addition of a new WWTP (RO that would meet water quality targets) and only one autoclave -- Copper concentrate would not be further processed. • Added rock buttressing at the Tailings Basin to increase geotechnical stability. • Surface seep system at the southern Tailings Basin dam, and surface water and groundwater containment system constructed around the north and west Tailings Basin dams capturing all surface and greater than 90 percent of all groundwater seepage, which would be directed to a new Plant Site WWTP. Treated water returned to the Tailings Basin or discharged to wetlands north of the Tailings Basin groundwater containment system to supplement a reduction in flow in that area. • During the construction of the Tailings Basin embankments, a bentonite amended oxygen barrier layer (at a depth of 30 inches from the surface of the dams) would be installed on exterior sides of dams. • During closure, bentonite would be incorporated into beach and pond areas of the Tailings Basin to reduce	• As per the SDEIS, with some minor changes to processing facilities and the Plant Site layout, including the addition of a new SAG mill and updating the sanitary sewage treatment system. • Relocation of the contents of the Coal Ash Landfill to the Hydrometallurgical Residue Facility (or other approved facility) prior to its current site being covered with NorthMet Project Proposed Actin tailings. • Incorporation of CDSM at the Tailings Basin to increase geotechnical stability. • Added surface seepage management system along the east Tailings Basin dams capturing all surface and greater than 90 percent of all groundwater seepage, which would be directed to the WWTP. • Using only treated water from the WWTP to augment flows affected by the containment system.	• New building layout better utilizing disturbed ground meaning reduced wetland effects. • Elimination of major air emission sources and electrical users. • Capture and treatment of greater than 90 percent of groundwater, and all surface seepage from Tailings Basin. • Improvement in the foundation stability of the Tailings Basin. • Augmentation of flow effects to wetlands adjacent to the Tailings Basin using treated water. • Improvement in the foundation stability of the Hydrometallurgical Residue Facility, which eliminates concerns about liner failure and provides a virtually zero leakage liner system.

DEIS Proposed Action	NorthMet Project Proposed Action as Presented in SDEIS Only	NorthMet Project Proposed Action as Presented in FEIS Only	DEIS to FEIS Comparison of Environmental Consequences
	the influx of oxygen and water. • Hydrometallurgical processing would only include one autoclave instead of two, reducing residue in half. • Hydrometallurgical Residue Facility would be located in the footprint of the existing LTVSMC Emergency Basin immediately southwest of the existing LTVSMC Cell 2W of the Tailings Basin.		